WHAT IS CLAIMED IS:

1. A semiconductor device comprising:

a supporting substrate made of insulating material;

a conductive pattern provided on a surface of the supporting substrate;

an external connecting terminal provided on a back surface of the supporting substrate and electrically connected to the conductive patterns;

a circuit element provided on the conductive pattern; and

a glass plate that covers the circuit element and that forms a hollow airtight portion between the supporting substrate and the glass plate.

2. A semiconductor device according to claim 1, wherein the glass plate includes a transparent glass plate.

3. A semiconductor device according to claim 1, wherein the supporting substrate includes a flat supporting portion and a column portion, and the conductive patterns are provided on the flat supporting portion.

4. A semiconductor device according to claim 1, wherein the glass plate is adhered onto the column portion.

5. A semiconductor device according to claim 1, wherein a via hole is provided in the supporting substrate, and the circuit element and the external connecting terminals are electrically connected through the via hole.

6. A semiconductor device according to claim 1, wherein the circuit element is formed of one of a semiconductor element and a fuse element.

7. A semiconductor device according to claim 6, wherein the fuse element is formed of a bonding wire.

8. A semiconductor device manufacturing method comprising steps of:

preparing a supporting substrate in which conductive patterns having a number of mounting portions thereon are provided on a surface of the supporting substrate and external connecting terminals are provided on a back surface of the supporting substrate;

fixing a circuit element onto respective mounting portions;

adhering a glass plate to cover the circuit element and to form a hollow airtight portion between the supporting substrate and the glass plate every mounting portion; and

dividing the supporting substrate into respective mounting portions by dicing adhered portions between the supporting substrate and the glass plate.

9. A semiconductor device manufacturing method according to claim 8, wherein a visual inspection of the adhered portions is carried out after the supporting substrate and the glass plate are adhered.

10. A semiconductor device manufacturing method comprising steps of:

preparing a supporting substrate in which conductive patterns having a number of mounting portions thereon are provided on a surface of the supporting substrate and external connecting terminals are provided on a back surface of the supporting substrate;

fixing a circuit element onto respective mounting portions;

mounting a lattice-like column member on the supporting substrate;

adhering a glass plate onto the column member to cover the circuit element and to form a hollow airtight portion formed by the supporting substrate, the column member and the glass plate every mounting portion; and

dividing the supporting substrate into respective

mounting portions by dicing adhered portions between the supporting substrate and the glass plate.

11. A semiconductor device manufacturing method according to claim 10, wherein a visual inspection of the adhered portions is carried out after the supporting substrate and the glass plate are adhered.